

## COMMONWEALTH of VIRGINIA

James S. Gilmore, III Governor

John Paul Woodley, Jr. Secretary of Natural Resources

## DEPARTMENT OF ENVIRONMENTAL QUALITY

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Dennis H. Treacy Director

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COMMONWEALTH OF VIRGINIA OPERATING PERMIT

STATIONARY SOURCE PERMIT TO OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Pentagon Reservation
DOD/OSD/WHS/RE&F/FFD
Pentagon Room 2A154
Washington, D.C. 20301-1155
Registration No. 70030
County-Plant No. 0013-0188

is authorized to operate

a Department of Defense office complex with a central boiler plant and a waste incineration facility

located at

Boundary Channel Dr. at Interstate Hwy 395 Arlington, Virginia

in accordance with the Conditions of this permit and all other applicable permits and regulations of the State Air Pollution Control Board.

Approved on May 17, 2000.

John In, Dune of Dennis H. Treacy Director

'ermit consists of 4 pages. Permit Conditions 1 to 9. PERMIT CONDITIONS - the regulatory reference and authority for the condition is listed in parentheses ( ) after each condition.

- 1. This permit establishes source-specific emission standards and/or other requirements to implement reasonably available control technology (RACT) as required by 9 VAC 5-40-310 and 9 VAC 5-40-311 of the State Air Pollution Control Board's Regulations.

  (9 VAC 5-80-800 C.2.b of State Regulations)
- .2. Equipment subject to 9 VAC 5 Chapter 40, Article 4 and RACT requirements pursuant to Section 182 of the federal Clean Air Act consists of:
  - three Zurn Industries natural gas or distillate oil-fired temporary boilers at the utilities plant, rated at 70 x  $10^6$  Btu/hr input each
  - one Consumat Model CS1000 classified waste incinerator,
     1 ton/hour maximum charge rate
  - one Consumat Model CS2000-HE classified waste incinerator, 2 tons/hour maximum charge rate
  - The emissions controls and limitations of the State Air Pollution Control Board permit to install and operate that was 3. issued on January 8, 1993 were determined to represent the required best available control technology, and therefore, for emissions of nitrogen oxides  $(NO_X)$  are no less stringent than Consequently, for the purposes of this permit, by the effective date of this permit the nitrogen oxides  $(NO_X)$ emissions from the three Zurn Industries natural gas or distillate oil-fired temporary boilers at the utilities plant shall be controlled by the already implemented replacement of those boilers with six #2-oil-fired Southern Technologies, Model No. S2-19 boilers rated 50.0  $\times$  10<sup>6</sup> Btu/hr each and equipped with low- $NO_X$  burners and flue gas recirculation (FGR), and the emissions of  $NO_X$  (as  $NO_2$ ) shall not exceed, averaged over 3 hours:
    - 0.065 lbs/106 Btu heat input, when firing natural gas;
    - 0.08 lbs/106 Btu heat input, when firing #2 fuel oil.
    - (9 VAC 5-40-310 and 9 VAC 5-40-311 of State Regulations)

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- 4. Exempted from the requirements of 9 VAC 5 Chapter 40, Article 4 for both volatile organic compounds (VOC) and nitrogen oxides (NO $_{\rm X}$ ) are the following:
  - a. Process operations with a process weight rate capacity less than 100 pounds per hour;
  - b. Any combustion unit using solid fuel with a maximum heat input of less than 350,000 Btu per hour;
  - c. Any combustion unit using liquid fuel with a maximum heat input of less than 1,000,000 Btu per hour;
  - d. Any combustion unit using gaseous fuel with a maximum heat input of less than 10,000,000 Btu per hour.
  - (9 VAC 5-40-240 of State Regulations)
- 5. Equipment specifically exempted from demonstrating RACT for  $NO_{\rm X}$  includes the following:
  - Any stationary internal combustion engine with a rated capacity of less than 450 hp of output power;
  - b. Any incinerator with a maximum capacity of less than 50 tons of waste per day (which at the Pentagon includes the two classified waste incinerators);
  - C. Any incinerator or thermal or catalytic oxidizer used exclusively as an air pollution control equipment;
  - d. Any generator used solely to supply emergency power to buildings during periods when normal power supplies are interrupted and during periods of scheduled maintenance.
  - (9 VAC 5-40-311 of State Regulations)
- At all times, including periods of startup, shutdown and malfunction, all units or processes, including any exempted by any conditions above, shall be maintained and operated to the extent possible in a manner consistent with good air pollution control practice of minimizing emissions.

  (9 VAC 5-40-20 and 9 VAC 5-170-160 of State Regulations)
- 7. Methods for demonstrating and reporting compliance with the conditions of this permit, including the periodic demonstration of compliance with the emission limits of

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this permit shall be incorporated in the federal operating ("Title V") permit for this facility. The records necessary to meet these requirements shall be as described in the federal operating permit and shall be retained by the permittee for a minimum of five years from the time that the relevant data was collected.

(9 VAC 5-80-110 of State Regulations)

- 8. In the event of any change in control of ownership of the permitted source, the permittee shall notify the succeeding owner of the existence of this permit by letter and send a copy of that letter to the Regional Compliance Manager.

  (9 VAC 5-80-940 of State Regulations)
- A copy of this permit shall be maintained on the premises of the facility to which it applies.
   (9 VAC 5-80-860 of State Regulations)